```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
     12731-63-4 REGISTRY
RN
     C.I. Reactive Black 31 (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
    Duasyn Black KRL-SF
CN
     Duasyn Black RL-SF-VP 228
CN
CN
     Reactive Black 31
     Remazol Black RL
CN
CN
     Remazol Black RL-ID
MF
     Unspecified
CI
     MAN
                  CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL
LC
     STN Files:
DT.CA CAplus document type: Journal; Patent
RL.P
       Roles from patents: BIOL (Biological study); PRP (Properties); USES
RLD.P
       Roles for non-specific derivatives from patents: USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
RL.NP
       study); PREP (Preparation); PROC (Process); PRP (Properties); USES
       (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: PROC (Process);
       PRP (Properties); USES (Uses)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
              42 REFERENCES IN FILE CA (1907 TO DATE)
               3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              42 REFERENCES IN FILE CAPLUS (1907 TO DATE)
=> d 12
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
L2
     85631-88-5 REGISTRY
RN
     2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4-[[4-[(2-amino-4-
CN
     hydroxyphenyl]azo]phenyl]amino]-3-sulfophenyl]azo]-5-hydroxy-6-(phenylazo)-
     , trisodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
    C.I. 30410
CN
CN
     C.I. Direct Black 168
     Coriacide Black SB
CN
     Direct Black 168
CN
     Direct Black H 8F-SF-VP132
CN
     Direct Black HEF-SF
CN
CN
     Duasyn Direct Black HEF-SF
DR
     83046-38-2
MF
     C34 H27 N9 O11 S3 . 3 Na
SR
     European Union (EU)
                 CA, CAPLUS, CHEMCATS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL
     STN Files:
LC
                     EINECS**, NDSL**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Journal; Patent
       Roles from patents: PREP (Preparation); PROC (Process); PRP
RL.P
       (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P
       Roles for non-specific derivatives from patents: PREP (Preparation);
       USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP
       (Properties); USES (Uses)
CRN (72066-88-7)
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$$ph-N=N$$
 NH_2
 NH_2
 NH_2
 NH_2

●3 Na

PAGE 1-B

__ OH

125 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
125 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 5610-64-0 REGISTRY

CN C.I. Acid Black 52 (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-, chromium complex (9CI)
- CN C.I. Acid Black 52, sodium salt (8CI)
- CN Chromium, 3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonic acid complex (9CI)

OTHER NAMES:

CN Acid black 52

- CN Acid Black M
- CN Acid Black MSh
- CN Aizen Opal Black WGH
- CN Aizen Opal Black WH
- CN Aluminum Black V
- CN Amasol Black WA
- CN Aminyl Black F-GL
- CN Black 7EMBL
- CN Black EMB
- CN Bucolan Black WA Extra
- CN C.I. 15711
- CN C.I. Mordant Black 1 chromium complex
- CN Calcofast Leather Black WA
- CN Calcofast Wool Black WA
- CN Chromacyl Black W
- CN Chrome Intra Black WA
- CN Chromolan Black NWA
- CN Chromolan Black WA
- CN Efdolan Black WAN
- CN Eriolan Black WAL
- CN Fenapal Black WA
- CN Gycolan Black WAL
- CN Gycolan Black WG
- CN Inochrome Black BNI Extra

```
CN
    Inoderme Grev B
CN
    Lanyl Black GW
CN
    Metallized Black WANA
    Neolan Black ALU
CN
    Neolan Black J
CN
CN
    Neolan Black WA
CN
    Neolan Black WA 140
CN
    Neolan Black WA Extra N
CN
    Neutral Grey 3BLS
    Nylosine Acid Black P-R
CN
CN
    Palatin Fast Black WAN
CN
    Palatine Black WAN Extra
    Palatine Black WANA
CN
CN
    Palatine Fast Black WAN Extra
    Printing Black for Silk BW
CN
    Stenamina Black B
CN
    Sumilan Black WA
CN
    Tertroxane Black WAN
CN
CN
    Vana Acid Black
CN
    Vitrolan Black WA
CN
    Vitrolan Black WA Extra N
CN
    Yamada Neo Fast Black WA
DEF
    This substance is identified in the COLOUR INDEX by Colour Index
    Constitution Number, C.I. 15711.
    12392-58-4, 10279-69-3, 34464-60-3
DR
MF
    Unspecified
CI
    COM, MAN
LC
    STN Files:
               AQUIRE, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, HSDB*,
      MSDS-OHS, NIOSHTIC, PROMT, TOXCENTER, USPATFULL
        (*File contains numerically searchable property data)
    Other Sources: DSL**, EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent; Report
      Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
      PROC (Process); PRP (Properties); USES (Uses); NORL (No role in record)
      Roles for non-specific derivatives from patents: USES (Uses)
      Roles from non-patents: ANST (Analytical study); BIOL (Biological
      study); OCCU (Occurrence); PROC (Process); PRP (Properties); RACT
      (Reactant or reagent); USES (Uses); NORL (No role in record)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            116 REFERENCES IN FILE CA (1907 TO DATE)
              3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            116 REFERENCES IN FILE CAPLUS (1907 TO DATE)
=> d 15
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN
    6473-13-8 REGISTRY
    diaminophenyl)azo]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]phenyl]amino]-3-
    sulfophenyl]azo]-4-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    diaminophenyl)azo]-1-hydroxy-3-sulfo-2-naphthyl]azo]anilino]-3-
    sulfophenyl]azo]-4-hydroxy-, trisodium salt (8CI)
OTHER NAMES:
    Aizen Primula Black ACH
CN
CN
    Amanil Fast Black FOR
CN
    Artificial Silk Black CA
CN
    Atlantic Formaldehyde Black GR
CN
    Bali Black A
```

```
Belaform Black G
CN
     Benzanil Fast Black 2G
CN
CN
     Benzo Black A 250
CN
     Benzonerol A
CN
     Benzonerol AFA extra
     Benzonerol Black VS
CN
CN
     Benzonerol VS
CN
     Benzonerol VSF
CN
     C.I. 35435
CN
     C.I. Direct Black 22
     Calcoform Black RN
CN
     Carbide Fast Black G
CN
CN
     Carbide Fast Black GA
CN
     Chlorazol Black GF
     Chlorazol Black GFP
CN
CN
     Chrome Leather Black GA
CN
     Cotton Black MA
     Cuprofix Black NF
CN
     Dialuminous Black A
CN
     Diazol Fast Black J
CN
     Diazol Fast Black JN
CN
CN
     Diphenyl Black FG
CN
     Direct Artificial Silk Black CA
CN
     Direct Black 22
CN
     Direct Black CA
     Direct Black NBR
CN
CN
     Direct Fast Black B
CN
     Direct Fast Black B 160
CN
     Direct Fast Black C
CN
     Direct Fast Black G
CN
     Direct Fast Black NS
     Dyrect Black GR
CN
CN
     Enianerol CA
CN
     Erie Fast Black G
CN
     Fenamin Black VA
CN
     Formal Fast Black B
CN
     Formal Fast Black G
     Formal Fast Black GG
CN
CN
     Formaldehyde Fast Black 2G
CN
     Formaldehyde Fast Black G
CN
     Formaldehyde Fast Black GA
CN
     Formalide Black GR
CN
     Hispamin Fast Dischargeable Black CA
CN
     Interchem Formaldehyde Black GDW
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
MF
     C44 H35 N13 O11 S3 . 3 Na
LC
     STN Files: BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN,
       CSCHEM, IFICDB, IFIPAT, IFIUDB, PROMT, SPECINFO, TOXCENTER, USPATFULL
                     DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Journal; Patent
RL.P
       Roles from patents: ANST (Analytical study); PREP (Preparation); PROC
       (Process); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
       USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); MSC (Miscellaneous); OCCU (Occurrence); PROC (Process); PRP
       (Properties); USES (Uses)
CRN (76186-07-7)
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$$N = N$$
 $N = N$
 $N = N$

3 Na

PAGE 1-B

105 REFERENCES IN FILE CA (1907 TO DATE) 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 106 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 16

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN L6

6428-31-5 REGISTRY RN

2,7-Naphthalenedisulfonic acid, 4-amino-3,6-bis[[4-[(2,4-CN diaminophenyl)azo]phenyl]azo]-5-hydroxy-, disodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

C.I. Direct Black 19, disodium salt (8CI)

OTHER NAMES:

Artificial Silk Black G CN

Artificial Silk Black GN CN

CN Artificial Silk Black GR

CN Atlantic Artificial Silk Black G

CNBali Viscose Black G

Bali Viscose Black N CN

CN Bencidal Fast Black G

Benzanil Fast Black G CN

CNBenzo Fast Black G

CN Benzoform Black RRA-CF

C.I. 35255 CN

CN C.I. Direct Black 19

CN Chlorazol Viscose Black B

CN Chrome Leather Black GNA

CN Cibafix Direct Black 19

Columbia Fast Black G CN

Columbia Fast Black GB CN

Coranil Direct Black B CN

CN Cutamin Black CG

CN Daiwa Black 320H

CN Diamine Fast Black B

CN Diaphtamine Fast Black KG

CN Direct Artificial Silk Black G

```
CN
     Direct Black 19
CN
     Direct Black L 3BG
CN
     Direct Fast Black G
CN
     Direct Fast Black GU
CN
     Direct Fast Black SA
CN
     Direct Lightfast Black G
CN,
     Direct Rayon Black KSG
     Fenamin Black GR
CN
CN
     Formal Fast Black 2B
CN
     Hispamin Fast Black CG
CN
     Indoblack GR
CN
     Kayarus Black G
CN
     Kayarus Black G Conc.
CN
     Orient P 200
CN
     Orient Water Black 100L
CN
     Orient Water Black 108L
CN
     Orient Water Black 200L
CN
     Phenamine Viscose Black RR
     Pyrazol Fast Black GS
CN
CN
     Rayon Black G
CN
     Rayon Black GSN
CN
     Rayon Black M
CN
     Rayon Fast Black B
CN/
     Solar Black G
CN
     Sumilight Black G
CN
     Tertrodirect Black V
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
DR
    431058-20-7, 135151-56-3, 69073-20-7, 73944-27-1, 76450-44-7
MF
     C34 H29 N13 O7 S2 . 2 Na
CI
     COM
LC
     STN Files:
                  CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, HSDB*, IFICDB,
       IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPAT2,
       USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Conference; Journal; Patent
RL.P
       Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP
       (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
       Roles for non-specific derivatives from patents: USES (Uses)
       Roles from non-patents: BIOL (Biological study); OCCU (Occurrence);
       PROC (Process); PRP (Properties); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological
       study); PREP (Preparation)
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PAGE 1-A

NH2

NH2

NH2

NH2

NH3

NH3

NH3

CRN (7518-68-5)

282 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 282 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> d 17
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
T.7
     12225-26-2 REGISTRY
RN
     C.I. Reactive Black 8 (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     2,7-Naphthalenedisulfonic acid, 5-[(4-amino-6-chloro-1,3,5-triazin-2-
     yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-, chromium cobalt
     complex (9CI)
     Chromium, 5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-
CN
    hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonic acid complex (9CI)
     Cobalt, 5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-
     hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonic acid complex (9CI)
OTHER NAMES:
CN
    Basilen Black P-BR
CN
     C.I. 18207
     Cibacron Black B-D
CN
CN
    Drimarene Black P-BL
    Helaktyn Black DN
CN
     Kayacion Black P-N
CN
     Kayacion Black P-N Liquid 40
CN
     Ostazin Black H-N
CN
CN
     Procion Black H-N
CN
     Procion Black P-N
CN
    Reactive Black 8
CN
    Reactive Black K-BR
CN
    Reactive Black MN
DR
     122178-50-1, 131595-00-1, 75026-76-5
MF
    Unspecified
CI
    MAN
                  AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CHEMLIST, CSCHEM,
LC
     STN Files:
       RTECS*, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
       CAplus document type: Conference; Journal; Patent
DT.CA
RL.P
       Roles from patents: BIOL (Biological study); PRP (Properties); USES
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
       USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP
       (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

72 REFERENCES IN FILE CA (1907 TO DATE)

72 REFERENCES IN FILE CAPLUS (1907 TO DATE)

3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

SO3H

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ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
     2118-39-0 REGISTRY
RN
     2,7-Naphthalenedisulfonic acid, 6-amino-4-hydroxy-3-[[7-sulfo-4-[(4-
CN
     sulfophenyl)azo]-1-naphthalenyl]azo]-, tetrasodium salt (9CI) (CA INDEX
OTHER CA INDEX NAMES:
     2,7-Naphthalenedisulfonic acid, 6-amino-4-hydroxy-3-[[7-sulfo-4-[(p-
     sulfophenyl)azo]-1-naphthyl]azo]-, tetrasodium salt (7CI)
CN
     C.I. Food Black 2, tetrasodium salt (8CI)
OTHER NAMES:
     Black 7984
CN
     Black No. 2
CN
CN
    C Black 7
CN
     C.I. 27755
     C.I. Food Black 2
CN
CN
     E 152
CN
     E 152 (dye)
CN
     Food Black 2
DR
     166889-67-4
MF
     C26 H19 N5 O13 S4 . 4 Na
CI
     COM
LC
                  CA, CAOLD, CAPLUS, CHEMLIST, CIN, NIOSHTIC, PIRA, SPECINFO,
     STN Files:
       TOXCENTER, USPAT2, USPATFULL
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Journal; Patent
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
       PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: USES (Uses)
      Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); PROC (Process); PRP (Properties); RACT (Reactant or reagent);
       USES (Uses); NORL (No role in record)
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CRN
HO3S
                  SO3H
                  NH2
        ÒН
                SO<sub>3</sub>H
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- 270 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 271 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 - 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d his

(FILE 'HOME' ENTERED AT 13:57:54 ON 18 JAN 2005)

FILE 'REGISTRY' ENTERED AT 13.58.25 ON 18 JA	1 2005

	 11001011	
L1	1 S	REACTIVE BLACK 31/CN
L2	1 S	DIRECT BLACK 168/CN
L3	1 S	ACID BLACK 52/CN
L4	0 S	DIRECT BLACK 170/CN
L5	1 S	DIRECT BLACK 22/CN
L6	1 S	DIRECT BLACK 19/CN
L7	1 S	REACTIVE BLACK 8/CN

0 S SOLVENT BLACK 13/CN

1 S FOOD BLACK 2/CN

=>

L9

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L2	2	(("5507865") or ("5116409")).PN.	US-PGPUB; USPAT	OR	OFF	2005/01/18 13:16
L3.	4	("4632703" "5242489" "5245159" "5279652").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/01/18 13:16
L4	2	("5507865").URPN.	USPAT	OR	ON	2005/01/18 13:17
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L6	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and betaine	DERWENT	OR	ON	2005/01/18 13:21
L7	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and (amine adj oxide)	DERWENT	OR	ON	2005/01/18 13:21
L8	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and lecithin	DERWENT	OR	ON	2005/01/18 13:20
L9	207	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and betaine	US-PGPUB; USPAT	OR	ON	2005/01/18 13:21
L10	73	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and (amine adj oxide)	US-PGPUB; USPAT	OR	ON	2005/01/18 13:21

S1	201	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or	US-PGPUB; USPAT	OR .	ON	2005/01/18 13:18
		glutamic or glutamine or glycine) and (amphoteric with surfactant)				